

Imprivata keeps oncology team connected at Dublin's Beaumont Hospital

“ We are already getting requests for Imprivata proximity cards from other staff. It's not often we get clinicians going out of their way to ask for technology, but this isn't about IT, it's about making lives easier. ”

David Kelly, IT Specialist, Beaumont Hospital

Key Facts

Industry: **Healthcare**
Location: **Dublin, Ireland**
Founded: **1987**
Customers: **Local community of 290,000 plus specialist services regionally and nationwide**
Beds: **820**
Staff: **3000**

Challenges

- Users challenged by complex access to a wide-ranging suite of clinical and business-critical applications
- Users move between machines, beds and usage contexts up to 100 times per day
- Essential for IT to support audit regime and allow medical staff to achieve compliance easily

Results

- Fast, secure No Click Access[®] to clinical applications enables providers to remain focused on patient care
- Compliance with the hospital's security and access policies is now a workable reality
- Security is an enabler for, instead of a barrier to, new services

About Beaumont Hospital

Beaumont Hospital is a large academic teaching hospital 5km north of Dublin City centre. With 820 beds, its 3,000 staff provide emergency and acute care services across 54 medical specialties to a community of almost 300,000 people.

It is the principal teaching hospital for the Royal College of Surgeons in Ireland and has privileged status as the National Referral Centre for Neurosurgery and Neurology, Renal Transplantation, and Cochlear Implantation, as the Regional Treatment Centre for Ear, Nose and Throat, and Gastroenterology, and as a Designated Cancer Centre.

Common challenges, clear strategies

Beaumont Hospital's commissioning of Imprivata was not borne of immediate crisis. The hospital has a long-standing relationship with Dublin technology consultancy, Triangle. With over a decade's partnership, Triangle's role has moved beyond tactical problem-solving to offering strategic advice on cutting-edge technologies and their applications in the healthcare sector. This allows Beaumont to make IT decisions with foresight and on a strong business case.

Equally, Beaumont was facing many of the challenges shared by hospitals across Europe seeking to generate efficiency, value and improved healthcare outcomes from technology. The use of multiple applications in innumerable clinical contexts meant that staff were signing in and out of machines and services up to 100 times a day. It was easier to have all-day logins for whole teams, but that came with a cost to governance and audit. Legacy systems on multiple platforms and a blend of direct and virtualised access to systems meant multiple sign-in processes and passwords between software and terminals.

Clinicians were being hampered by an ever-increasing workload of login credentials. And when they forgot them, the IT team would need to spend their time and talent on password management.

“Because we’re monitoring the usage of each application, governance suddenly becomes workable; integrated into each clinician’s workday. We can leave it all to each individual’s proximity cards rather than having shared logins for each department.”

The Imprivata solution

To resolve staff authentication in the most demanding of clinical contexts, Triangle recommended Imprivata single sign-on and authentication management. Triangle’s CTO, Richard O’Brien says, “Imprivata was the logical choice because they’re the leaders in this space with ample healthcare experience; and they tie in very nicely with VMware which was Beaumont’s preferred platform, so it was really a no-brainer in that respect.”

To initially demonstrate use cases and allow Beaumont’s IT team to skill up, Triangle built a prototype ‘lab’, with Imprivata installed on machines with similar load and configuration to Beaumont.

Imprivata has now been deployed with an initial pilot into one of the most challenging environments at Beaumont; the oncology department, which features a day/outpatients ward and a 24/7 care ward. Beaumont Hospital IT specialist David Kelly says, “We picked the oncology ward because it’s like no other. It has so many patients that doctors are moving from bed to consulting room to PC constantly, all day long. They are updating the system all the time, and it’s not unusual for a consultant to use every one of the 12 PCs on the ward at least once each day.”

Triangle’s O’Brien says, “With Imprivata, doctors are able to walk up to a terminal anywhere in the oncology ward, tap once and be straight into their desktop. Then, click once on an application and they’re straight into that application. And some of the applications are Citrix-based which typically have required two logins to gain access; or have multiple menu levels. Imprivata brings it straight to where they need to be. So they are not only saving log in time, they are also saving a number of additional ‘clicks’ in getting through menu items. What Imprivata does is enable that ‘Tap, I’m in, let’s go!’”

Oncology staff of course benefit from all the services via Imprivata they would expect to use in their everyday work. Says Kelly, “We have email, the internet proxy and our Directory Manager which is an HR application. But we have 9 applications integrated in all, and more to follow”. Agnostic of platform or OS, Imprivata at Beaumont already gateways to:

- PACS, the national system for images (X-Rays, scans etc.)
- RIS, a national radiology service ordering system
- NIS, the Notes Information System used on the ward for patient notes and medications etc.
- PIPE, the Patient Information Profile Explorer used by doctors and nurses on the wards
- And the bespoke BHIS, Beaumont Hospital Information System.

Dr Oscar S. Breathnach, Consultant Medical Oncologist, says, “The introduction of the ‘tap and I’m in’ system to auto-populate key high frequency use applications has been a success throughout most users’ experiences. As we are preparing for the go-live of our EMR / e-prescribing system, the ability to auto-populate both the Citrix and Aria gateways has removed the barrier that two separate though dependant passwords was creating. Parallel to this is the fact that currently we use the PIPE system to order and review lab reports. The auto-population of passwords has again allowed more speed and efficiency in moving between the various programs.”

BHIS in particular was a challenge turned into an opportunity. Says Kelly, “BHIS is 25 years old and we use a terminal emulator to connect to it. Plus

“The lab environment meant we could not only demonstrate a proof of concept, but also demo it to clinicians, so they could see what was possible, and we could learn more about their specific needs and use cases. It was great to generate enthusiasm within the hospital itself.”

there are four different ways to sign into it depending on role and what you want to do; for example making an appointment in three months time. All in all, there are probably 70 different options once a user has signed in with their ID.

“So as part of installing Imprivata, we looked at the way the staff were using it and replicated the keystrokes in macros. Even though it’s a 25 year old system, when staff log in via Imprivata, they now get dropped into exactly the part of the system they need. It saves three or four screens and clicks at a time.”

O’Brien says the successful integration of BHIS (and indeed many other applications) is down to the rigorous application of Imprivata’s profiling process. “We focus on understanding the login process: what a successful login looks like, what a failure looks like, what a password change looks like. Then we put it through robust user testing. By the time it’s released to the end user, every use case has been profiled. It means we don’t fall over when real people start using the system.”

Clinical time saved, governance improved

Those saved clicks are mounting up. O’Brien says, “Imprivata automatically gives us reports on logins, and we can extrapolate from that into keystrokes saved and therefore significant clinical time saved per week.

“Plus, because we’re monitoring the usage of each application, governance suddenly becomes workable; integrated into each clinician’s workday. We can leave it all to each individual’s proximity cards rather than having shared logins for each department.

“And it’s not just the time constantly keying in passwords in many different applications that’s saved: it’s a hospital, so they’ve got a lot of restrictions in terms of time-outs, most of which happen sooner than a lower-security operation would demand. Staff were constantly rekeying passwords. Logging out, too, used to involve multiple keystrokes for each application; now they can log out of everything on a machine with one tap. We’ve taken away all the effort and, more importantly, the irritation”.

This has not gone unnoticed. Dr Breathnach says “Other allied health professionals are eager to have similar access as they can also see the obvious benefits.” David Kelly adds, “We are already getting requests for Imprivata proximity cards from other staff. So word is spreading fast and our next step is to equip everyone associated with oncology with Imprivata and then work outward with licenses from there. I’ve already had a social worker come to see us – she said, ‘I feel left out – I’m the only person who hasn’t got it!’ It’s not often we get clinicians going out of their way to ask for technology, but this isn’t about IT, it’s about making lives easier.”

Tech Deployment 101

Support for Imprivata is high at Beaumont Hospital, but was by no means guaranteed. Healthcare is littered with examples of tech deployments which have gone wrong.

O’Brien says the key to success is making life easy for the end user. “The lab environment meant we could not only demonstrate a proof of concept, but also demo it to clinicians, so they could see what was possible, and we could learn more about their specific needs and use cases. It was great to generate enthusiasm within the hospital itself. And working with the Imprivata consultants, I couldn’t sing their praises highly enough - they have the domain knowledge, they have the experience, and they



About Imprivata

Imprivata, the healthcare IT security company, enables healthcare globally to access, communicate, and transact patient information, securely and conveniently. The Imprivata platform addresses critical compliance and security challenges while improving productivity and the patient experience.

For further information please contact us at:

+44 208 744 6500
or visit us online at
www.imprivata.co.uk

About Triangle

Triangle are technology leaders. We introduce new technologies and frameworks, safely and securely, to deliver measurable efficiencies and create new capabilities for our customers. Our experts design and integrate complex IT projects across a combination of public and private cloud infrastructures to deliver trusted solutions.

For further information please contact us at:

+353 1 6579 700
or visit us online at
www.triangle.ie

understand the clinical environment.”

“Then, at rollout, David Kelly made sure we had the new lanyards ready and the tags all prepared to retrofit the staff ID cards. It wasn’t just an email, everyone got a personal service. The moment each user was registered, they had access to everything and could immediately see the potential for a different way of working.”

Tomorrow’s plans

Moving forward, single sign-on is a key aspect of Beaumont’s IT. “We’re actually at an interesting point in our IT development”, says Kelly. “We’re working out our optimum end-user computing strategy. It might be mobile desktop or virtual apps but I can promise that it will be single sign-on and the next step there is Follow-me Desktop.”

Says O’Brien, “Single sign-on has opened the eyes of the administration team here in the hospital to what can be achieved, so the next step is the additional saving of Follow-me Desktops; but also then adding extra applications. One of the areas we’re hoping to target here is the system for tracking medical instruments used in theatre because it’s actually a third party application that’s hosted offsite and there are two layers of login to access it. Again, we’re hoping to implement Imprivata because it will make the system more acceptable for users.

“Then, there are lots of additional value adds like Self Service Password Management under the control of Imprivata that has been recognised as part of the pilot and which will keep on saving time for clinicians and reduce the burden on the IT team.”

Switch and Go!

Kelly says the initial (and indeed future) investment in Imprivata is more than outweighed by the time it saves – time for staff at all levels of clinical expertise. He monitors the tally of clicks saved and notes that the oncology team is now fully accustomed to the technology– his only expense being some laminated posters featuring tips for beginners. “They’re using it all the time”, he says. “They literally walk up, tap and I’m in.”